

EMBEDDED ATTENUATED PHASE SHIFT MASK WITH TUNABLE TRANSMISSION

ABSTRACT OF THE DISCLOSURE

The attenuation and phase shift properties of an embedded attenuated phase shift mask (EAPSM) may be independently selected. After or during plowing of regions of an embedded phase shift layer, exposed regions of a substrate are etched to a predetermined depth. Additional regions of the embedded phase shift layer are then exposed and trimmed to a predetermined thickness for providing the desired amount of attenuation, with the final etched depth of the substrate compensating for the change of relative phase shift caused by trimming of the phase shift layer. A matrix test device having a plurality of cells with different levels of attenuation and/or phase shift may then be fabricated on a single EAPSM blank.